

# Ovčiarisko tunnel – interpretation of the results of the geotechnical monitoring

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**Abstract.** The Ovčiarisko twin-tube tunnel is part of the development of the Hričovské Podhradie – Lietavská Lúčka section of the D1 motorway, running southwest of the Žilina town. The D1 motorway overcomes the detached mass of an overthrust sheet and the western edge of the Paleogene fill of the Žilina Basin through the Ovčiarisko tunnel. The 2T – 8 category is designated for the Ovčiarisko tunnel with the total length of the northern tunnel tube 2360 m and southern tunnel tube 2367 m. the tunnel orientation to the cardinals is on the west-east axis, the marking of tunnel portals and tunnels tubes is distinguished according to it. The design speed is 100 km/h, respectively 90 km/h under worsened weather conditions. Parts of the tunnel are three cross passages passable for vehicles and five cross passages passable for pedestrians, serving as protected escape routes. This report describes geotechnical monitoring, construction technology and procedures with respect to complicated geological conditions. The geological conditions require the operative approach of the project owner, contractor, designer and geologist to the optimum solution for the running of the tunnel construction.